Claims

[1]   A method of manufacturing liquid crystal display device comprising the steps of:
forming an organic material film having projections and depressions, using a
photo-embossing material, on an insulating film on an underlying electrode in a
thin-film transistor of an active-matrix liquid crystal display device;
exposing said insulating film in a contact-hole-forming-area by reducing a
thickness of said organic material film by a dry etching to said organic material
film; and
forming a contact hole by a dry etching to the exposed insulating film.

[2]   A method as claimed in claim 1, further comprising the steps of:
exposing said underlying electrode in forming said contact hole; and
contacting the exposed underlying electrode with a reflective electrode by
forming said reflective electrode on the resulting structure.

[3]   A method as claimed in claim 1 or 2, wherein said photo-embossing material is a
material patternable by an exposing step and a baking step.

[4]   A method as claimed in claim 3, wherein said organic material film is formed by
exposing and baking said photo-embossing material in forming said organic
material film.

[5]   A method as claimed in claim 4, wherein a halftone mask or a diffraction mask is
used in exposing.

[6]   A method as claimed in any one of claims 1 to 5, wherein the dry processes are
performed from the step of forming said organic material film to the step of
forming said contact hole.

[7]   A method as claimed in any one of claims 1 to 6, wherein the step of exposing
said insulating film and the step of forming said contact hole are performed in a
single apparatus.

[8]   A method as claimed in any one of claims 1 to 7, wherein a dry etching process
in the step of exposing said insulating film is performed in an Inductively
Coupled Plasma mode or a reactive ion etching mode.

[9]   A method as claimed in any one of claims 1 to 8, wherein said liquid crystal
display device is a reflective type of liquid crystal display device or a
transflective type of liquid crystal display device.